

APPENDIX C
LABORATORY ANALYTICAL REPORTS



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Thursday, August 05, 2004

F. Van Alstine
Innovative Technical Solutions, Inc.
960 W. Elliot Rd., Ste. 108
Tempe, AZ 85284

TEL: (480) 706-6488

FAX: (480) 704-2952

RE: USDA Phase II/03-190.02

Order No.: 04070802

Dear F. Van Alstine:

Aerotech Environmental received 31 sample(s) on 7/12/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Marcia A. Smith
Vice President - Client Services



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.

Project: USDA Phase II/03-190.02

Lab Order: 04070802

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
04070802-01A	AG-4331-01A		7/12/2004 8:15:00 AM	7/12/2004
04070802-02A	AG-4331-01B		7/12/2004 8:20:00 AM	7/12/2004
04070802-03A	AG-4331-01C		7/12/2004 8:25:00 AM	7/12/2004
04070802-04A	AG-4331-02A		7/12/2004 8:30:00 AM	7/12/2004
04070802-05A	AG-4331-02B		7/12/2004 8:35:00 AM	7/12/2004
04070802-06A	AG-4331-02C		7/12/2004 8:40:00 AM	7/12/2004
04070802-07A	AG-4331-03A		7/12/2004 8:45:00 AM	7/12/2004
04070802-08A	AG-4331-03B		7/12/2004 8:50:00 AM	7/12/2004
04070802-09A	AG-4331-03C		7/12/2004 8:55:00 AM	7/12/2004
04070802-10A	AG-4331-04A		7/12/2004 9:00:00 AM	7/12/2004
04070802-11A	AG-4331-04B		7/12/2004 9:05:00 AM	7/12/2004
04070802-12A	AG-4331-04C		7/12/2004 9:10:00 AM	7/12/2004
04070802-13A	AG-4331-05A		7/12/2004 9:15:00 AM	7/12/2004
04070802-14A	AG-4331-05B		7/12/2004 9:20:00 AM	7/12/2004
04070802-15A	AG-4331-05C		7/12/2004 9:25:00 AM	7/12/2004
04070802-16A	DW-4331-01		7/12/2004 9:45:00 AM	7/12/2004
04070802-17A	AG-4135-01A		7/12/2004 11:45:00 AM	7/12/2004
04070802-18A	AG-4135-01B		7/12/2004 11:50:00 AM	7/12/2004
04070802-19A	AG-4135-01C		7/12/2004 11:55:00 AM	7/12/2004
04070802-20A	AG-4135-02A		7/12/2004 12:00:00 PM	7/12/2004
04070802-21A	AG-4135-02B		7/12/2004 12:05:00 PM	7/12/2004
04070802-22A	AG-4135-02C		7/12/2004 12:10:00 PM	7/12/2004
04070802-23A	AG-4135-03A		7/12/2004 12:15:00 PM	7/12/2004
04070802-24A	AG-4135-03B		7/12/2004 12:20:00 PM	7/12/2004
04070802-25A	AG-4135-03C		7/12/2004 12:25:00 PM	7/12/2004
04070802-26A	AG-4135-04A		7/12/2004 12:30:00 PM	7/12/2004
04070802-27A	AG-4135-04B		7/12/2004 12:35:00 PM	7/12/2004
04070802-28A	AG-4135-04C		7/12/2004 12:40:00 PM	7/12/2004
04070802-29A	AG-4135-05A		7/12/2004 12:45:00 PM	7/12/2004
04070802-30A	AG-4135-05B		7/12/2004 12:50:00 PM	7/12/2004
04070802-31A	AG-4135-05C		7/12/2004 12:55:00 PM	7/12/2004
04070802-32A	AG-4331-01	Composite	7/12/2004 8:25:00 AM	7/12/2004
04070802-33A	AG-4331-02	Composite	7/12/2004 8:40:00 AM	7/12/2004
04070802-34A	AG-4331-03	Composite	7/12/2004 8:55:00 AM	7/12/2004
04070802-35A	AG-4331-04	Composite	7/12/2004 9:10:00 AM	7/12/2004
04070802-36A	AG-4331-05	Composite	7/12/2004 9:25:00 AM	7/12/2004
04070802-37A	AG-4135-01	Composite	7/12/2004 11:55:00 AM	7/12/2004
04070802-38A	AG-4135-02	Composite	7/12/2004 12:10:00 PM	7/12/2004



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CLIENT: Innovative Technical Solutions, Inc.
Project: USDA Phase II/03-190.02
Lab Order: 04070802

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
04070802-39A	AG-4135-03	Composite	7/12/2004 12:25:00 PM	7/12/2004
04070802-40A	AG-4135-04	Composite	7/12/2004 12:40:00 PM	7/12/2004
04070802-41A	AG-4135-05	Composite	7/12/2004 12:55:00 PM	7/12/2004



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Aerotech Environmental

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Project: USDA Phase II/03-190.02
Lab Order: 04070802

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.

Samples for Method 8260B were submitted in brass sleeves and extracted into methanol within 48 hours by the laboratory.

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

C6 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method



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Lab Order: 04070802

CASE NARRATIVE

- 8000B, the higher value was reported as there were no obvious chromatographic interference.
- D2 Sample required dilution due to high concentration of target analyte.
- E2 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E4 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- L1 The associated blank spike recovery was above laboratory acceptance limits.
- M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.
- M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.
- R5 MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R7 LCS/LCSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.



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Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-16A

Client Sample ID: DW-4331-01
Tag Number:
Collection Date: 7/12/2004 9:45:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FUEL HYDROCARBONS, 8015AZR1		8015AZR1				Analyst: MH
Gasoline Hydrocarbons: C6-C10	< 20.0	20.0		mg/Kg	1	7/13/2004
Diesel Hydrocarbons: C10-C22	< 30.0	30.0		mg/Kg	1	7/13/2004
Oil Hydrocarbons: C22-C32	< 100	100		mg/Kg	1	7/13/2004
Fuel Hydrocarbons, C10-C32	< 130	130		mg/Kg	1	7/13/2004
Surr: O-Terphenyl	102	70-130		%REC	1	7/13/2004
ICP METALS		SW6010B				Analyst: TD
Arsenic	< 5.0	5.0		mg/Kg	1	7/16/2004
Barium	120	5.0		mg/Kg	1	7/16/2004
Cadmium	0.94	0.50		mg/Kg	1	7/16/2004
Chromium	24	2.0		mg/Kg	1	7/16/2004
Lead	24	5.0		mg/Kg	1	7/16/2004
Selenium	< 10	10		mg/Kg	1	7/16/2004
Silver	< 2.5	2.5		mg/Kg	1	7/16/2004
MERCURY, TOTAL		SW7471A				Analyst: PC
Mercury	0.16	0.095		mg/Kg	1	7/16/2004
VOLATILES BY GC/MS		SW8260B				Analyst: CU
1,1,1-Trichloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,1,2,2-Tetrachloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,1,2-Trichloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,1-Dichloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,1-Dichloroethene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,1-Dichloropropene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,2,3-Trichlorobenzene	< 0.10	0.10		mg/Kg	1	7/13/2004
1,2,3-Trichloropropane	< 0.10	0.10		mg/Kg	1	7/13/2004
1,2,4-Trimethylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,2-Dibromoethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,2-Dichlorobenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,2-Dichloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,2-Dichloropropane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,3,5-Trimethylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,3-Dichlorobenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
1,3-Dichloropropane	< 0.050	0.050		mg/Kg	1	7/13/2004
1,4-Dichlorobenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
2,2-Dichloropropane	< 0.10	0.10		mg/Kg	1	7/13/2004
2-Butanone (MEK)	< 0.25	0.25		mg/Kg	1	7/13/2004
2-Chlorotoluene	< 0.050	0.050		mg/Kg	1	7/13/2004
2-Hexanone	< 0.25	0.25		mg/Kg	1	7/13/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-16A

Client Sample ID: DW-4331-01
Tag Number:
Collection Date: 7/12/2004 9:45:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		SW8260B		Analyst: CU		
4-Chlorotoluene	< 0.050	0.050		mg/Kg	1	7/13/2004
4-Isopropyltoluene	0.050	0.050		mg/Kg	1	7/13/2004
4-Methyl-2-pentanone	< 0.25	0.25		mg/Kg	1	7/13/2004
Acetone	< 0.50	0.50	L1	mg/Kg	1	7/13/2004
Benzene	< 0.050	0.050		mg/Kg	1	7/13/2004
Bromobenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
Bromochloromethane	< 0.050	0.050		mg/Kg	1	7/13/2004
Bromodichloromethane	< 0.050	0.050		mg/Kg	1	7/13/2004
Bromoform	< 0.050	0.050		mg/Kg	1	7/13/2004
Bromomethane	< 0.25	0.25		mg/Kg	1	7/13/2004
Carbon tetrachloride	< 0.050	0.050		mg/Kg	1	7/13/2004
Chlorobenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
Chloroethane	< 0.050	0.050		mg/Kg	1	7/13/2004
Chloroform	< 0.050	0.050		mg/Kg	1	7/13/2004
Chloromethane	< 0.25	0.25		mg/Kg	1	7/13/2004
cis-1,2-Dichloroethene	< 0.050	0.050		mg/Kg	1	7/13/2004
cis-1,3-Dichloropropene	< 0.050	0.050		mg/Kg	1	7/13/2004
Dibromochloromethane	< 0.050	0.050		mg/Kg	1	7/13/2004
Dichlorodifluoromethane	< 0.050	0.050		mg/Kg	1	7/13/2004
Ethylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
m,p-Xylene	< 0.10	0.10		mg/Kg	1	7/13/2004
Methyl tert-butyl ether	< 0.050	0.050		mg/Kg	1	7/13/2004
Methylene chloride	< 0.10	0.10		mg/Kg	1	7/13/2004
n-Butylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
n-Propylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
o-Xylene	< 0.050	0.050		mg/Kg	1	7/13/2004
sec-Butylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
Styrene	< 0.050	0.050		mg/Kg	1	7/13/2004
tert-Butylbenzene	< 0.050	0.050		mg/Kg	1	7/13/2004
Tetrachloroethene	< 0.050	0.050		mg/Kg	1	7/13/2004
Toluene	< 0.050	0.050		mg/Kg	1	7/13/2004
trans-1,2-Dichloroethene	< 0.050	0.050		mg/Kg	1	7/13/2004
trans-1,3-Dichloropropene	< 0.050	0.050		mg/Kg	1	7/13/2004
Trichloroethene	< 0.050	0.050		mg/Kg	1	7/13/2004
Trichlorofluoromethane	1.5	0.050		mg/Kg	1	7/13/2004
Vinyl acetate	< 0.050	0.050		mg/Kg	1	7/13/2004
Vinyl chloride	< 0.050	0.050		mg/Kg	1	7/13/2004
Surr: 4-Bromofluorobenzene	68.3	63-121		%REC	1	7/13/2004
Surr: Dibromofluoromethane	76.2	52-128		%REC	1	7/13/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-16A

Client Sample ID: DW-4331-01
Tag Number:
Collection Date: 7/12/2004 9:45:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS						Analyst: CU
Surr: Toluene-d8	76.6	65-121		%REC	1	7/13/2004

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-32A

Client Sample ID: AG-4331-01
Tag Number: Composite
Collection Date: 7/12/2004 8:25:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.11	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.36	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	82.9	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	81.9	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	101	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	87.4	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-32A

Client Sample ID: AG-4331-01
Tag Number: Composite
Collection Date: 7/12/2004 8:25:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A				Analyst: MH
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	63.4	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.

Client Sample ID: AG-4331-02

Lab Order: 04070802

Tag Number: Composite

Project: USDA Phase II/03-190.02

Collection Date: 7/12/2004 8:40:00 AM

Lab ID: 04070802-33A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.23	0.050	D2	mg/Kg	10	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.60	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	82.3	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	82.0	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	81.3	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	76.2	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.

Client Sample ID: AG-4331-02

Lab Order: 04070802

Tag Number: Composite

Project: USDA Phase II/03-190.02

Collection Date: 7/12/2004 8:40:00 AM

Lab ID: 04070802-33A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES						Analyst: MH
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	63.9	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-34A

Client Sample ID: AG-4331-03
Tag Number: Composite
Collection Date: 7/12/2004 8:55:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.10	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.27	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	82.8	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	83.9	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: SC		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/28/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/28/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/28/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/28/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/28/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/28/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/28/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/28/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/28/2004
Surr: TPP (Surrogate)	78.5	20-151		%REC	1	7/28/2004
Surr: Tributylphosphate (Surrogat	77.5	28-140		%REC	1	7/28/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-34A

Client Sample ID: AG-4331-03
Tag Number: Composite
Collection Date: 7/12/2004 8:55:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	65.6	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-35A

Client Sample ID: AG-4331-04
Tag Number: Composite
Collection Date: 7/12/2004 9:10:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.011	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.39	0.10	C6	mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	83.1	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	84.3	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	66.3	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	66.1	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-35A

Client Sample ID: AG-4331-04
Tag Number: Composite
Collection Date: 7/12/2004 9:10:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	68.0	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-36A

Client Sample ID: AG-4331-05
Tag Number: Composite
Collection Date: 7/12/2004 9:25:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.050	0.050		mg/Kg	10	7/15/2004
gamma-BHC	< 0.050	0.050		mg/Kg	10	7/15/2004
beta-BHC	< 0.050	0.050		mg/Kg	10	7/15/2004
Heptachlor	< 0.050	0.050		mg/Kg	10	7/15/2004
delta-BHC	< 0.050	0.050		mg/Kg	10	7/15/2004
Aldrin	< 0.050	0.050		mg/Kg	10	7/15/2004
Heptachlor epoxide	< 0.050	0.050		mg/Kg	10	7/15/2004
Endosulfan I	< 0.050	0.050		mg/Kg	10	7/15/2004
4,4'-DDE	0.46	0.050	D2	mg/Kg	10	7/15/2004
Dieldrin	< 0.050	0.050		mg/Kg	10	7/15/2004
Endrin	< 0.050	0.050		mg/Kg	10	7/15/2004
4,4'-DDD	< 0.050	0.050		mg/Kg	10	7/15/2004
Endosulfan II	< 0.050	0.050		mg/Kg	10	7/15/2004
4,4'-DDT	< 0.050	0.050		mg/Kg	10	7/15/2004
Endrin aldehyde	< 0.050	0.050		mg/Kg	10	7/15/2004
Endosulfan sulfate	< 0.050	0.050		mg/Kg	10	7/15/2004
Methoxychlor	< 0.10	0.10		mg/Kg	10	7/15/2004
Chlordane	< 0.50	0.50		mg/Kg	10	7/15/2004
Toxaphene	0.29	0.10	C6	mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	77.9	26-137		%REC	10	7/15/2004
Surr: Tetrachloro-m-xylene	79.8	30-139		%REC	10	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	94.1	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	83.2	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.

Client Sample ID: AG-4331-05

Lab Order: 04070802

Tag Number: Composite

Project: USDA Phase II/03-190.02

Collection Date: 7/12/2004 9:25:00 AM

Lab ID: 04070802-36A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES						
		SW8151A				Analyst: MH
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	54.8	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

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(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-37A

Client Sample ID: AG-4135-01
Tag Number: Composite
Collection Date: 7/12/2004 11:55:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.093	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.34	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	70.1	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	72.8	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	97.2	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	84.9	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-37A

Client Sample ID: AG-4135-01
Tag Number: Composite
Collection Date: 7/12/2004 11:55:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	64.5	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-38A

Client Sample ID: AG-4135-02
Tag Number: Composite
Collection Date: 7/12/2004 12:10:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.12	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.50	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	77.4	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	76.1	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	79.9	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	70.9	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-38A

Client Sample ID: AG-4135-02
Tag Number: Composite
Collection Date: 7/12/2004 12:10:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	65.0	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT:	Innovative Technical Solutions, Inc.	Client Sample ID:	AG-4135-03
Lab Order:	04070802	Tag Number:	Composite
Project:	USDA Phase II/03-190.02	Collection Date:	7/12/2004 12:25:00 PM
Lab ID:	04070802-39A	Matrix:	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.12	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.50	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	77.6	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	76.2	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	33.7	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	43.3	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-39A

Client Sample ID: AG-4135-03
Tag Number: Composite
Collection Date: 7/12/2004 12:25:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	54.8	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-40A

Client Sample ID: AG-4135-04
Tag Number: Composite
Collection Date: 7/12/2004 12:40:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.067	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.38	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	68.1	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	66.4	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	54.9	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	54.7	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-40A

Client Sample ID: AG-4135-04
Tag Number: Composite
Collection Date: 7/12/2004 12:40:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	63.7	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-41A

Client Sample ID: AG-4135-05
Tag Number: Composite
Collection Date: 7/12/2004 12:55:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		SW8081A		Analyst: SC		
alpha-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
gamma-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
beta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor	< 0.0050	0.0050		mg/Kg	1	7/15/2004
delta-BHC	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Aldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Heptachlor epoxide	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan I	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDE	0.076	0.0050		mg/Kg	1	7/15/2004
Dieldrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDD	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan II	< 0.0050	0.0050		mg/Kg	1	7/15/2004
4,4'-DDT	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endrin aldehyde	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Endosulfan sulfate	< 0.0050	0.0050		mg/Kg	1	7/15/2004
Methoxychlor	< 0.010	0.010		mg/Kg	1	7/15/2004
Chlordane	< 0.050	0.050		mg/Kg	1	7/15/2004
Toxaphene	0.38	0.10		mg/Kg	1	7/15/2004
Surr: Decachlorobiphenyl	78.8	26-137		%REC	1	7/15/2004
Surr: Tetrachloro-m-xylene	78.0	30-139		%REC	1	7/15/2004
ORGANOPHOSPHORUS PESTICIDES		SW8141A		Analyst: HT		
Chlorpyrifos	< 0.10	0.10		mg/Kg	1	7/15/2004
Demeton, Total	< 0.50	0.50		mg/Kg	1	7/15/2004
Diazinon	< 0.10	0.10		mg/Kg	1	7/15/2004
Disulfoton	< 0.10	0.10		mg/Kg	1	7/15/2004
Ethion	< 0.10	0.10		mg/Kg	1	7/15/2004
Fenthion	< 0.10	0.10		mg/Kg	1	7/15/2004
Malathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Methyl parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Parathion	< 0.10	0.10		mg/Kg	1	7/15/2004
Surr: TPP (Surrogate)	38.1	20-151		%REC	1	7/15/2004
Surr: Tributylphosphate (Surrogat	43.1	28-140		%REC	1	7/15/2004
CHLORINATED HERBICIDES		SW8151A		Analyst: MH		
Dichlorprop	< 0.025	0.025		mg/Kg	1	7/16/2004
Pentachlorophenol	< 0.010	0.010		mg/Kg	1	7/16/2004
Dicamba	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-D	< 0.025	0.025		mg/Kg	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 05-Aug-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070802
Project: USDA Phase II/03-190.02
Lab ID: 04070802-41A

Client Sample ID: AG-4135-05
Tag Number: Composite
Collection Date: 7/12/2004 12:55:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHLORINATED HERBICIDES						Analyst: MH
2,4,5-TP (Silvex)	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4,5-T	< 0.025	0.025		mg/Kg	1	7/16/2004
2,4-DB	< 0.025	0.025		mg/Kg	1	7/16/2004
Dinoseb	< 0.025	0.025		mg/Kg	1	7/16/2004
Surr: DCAA	50.6	17-117		%REC	1	7/16/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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Aerotech Environmental Laboratories

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Tuesday, July 27, 2004

F. Van Alstine
Innovative Technical Solutions, Inc.
900 W. Elliot Rd., Suite 108
Tempe, AZ 85284

TEL: (480) 706-6488

FAX (480) 704-2952

RE: USDA Phase #/03-190.02

Order No.: 04070822

Dear F. Van Alstine:

Aerotech Environmental received 1 sample(s) on 7/13/2004 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Marcia A. Smith

Vice President - Client Services



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Date: 27-Jul-04

CLIENT: Innovative Technical Solutions, Inc.
Project: USDA Phase #/03-190.02
Lab Order: 04070822

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
04070822-01B	ST-4331-01		7/13/2004 7:30:00 AM	7/13/2004
04070822-01D	ST-4331-01		7/13/2004 7:30:00 AM	7/13/2004



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Date: 27-Jul-04

CLIENT: Innovative Technical Solutions, Inc.

Project: USDA Phase #/03-190.02

Lab Order: 04070822

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

Q8 Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.

S12 Surrogate recovery was low. Data reported per ADEQ policy 0154.000.



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 27-Jul-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070822
Project: USDA Phase #/03-190.02
Lab ID: 04070822-01B

Client Sample ID: ST-4331-01
Tag Number:
Collection Date: 7/13/2004 7:30:00 AM
Matrix: WASTE WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS						
		SW6010B				Analyst: TD
Arsenic	< 0.10	0.10		mg/L	1	7/13/2004
Barium	0.12	0.010		mg/L	1	7/13/2004
Cadmium	0.0057	0.0010		mg/L	1	7/13/2004
Chromium	< 0.010	0.010		mg/L	1	7/13/2004
Lead	< 0.015	0.015		mg/L	1	7/13/2004
Selenium	< 0.10	0.10		mg/L	1	7/13/2004
Silver	< 0.010	0.010		mg/L	1	7/13/2004
MERCURY, TOTAL						
		SW7470A				Analyst: PC
Mercury	< 0.00050	0.00050		mg/L	1	7/19/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

Page 1 of 3



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Analytical Report

Date: 27-Jul-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070822
Project: USDA Phase #/03-190.02
Lab ID: 04070822-01D

Client Sample ID: ST-4331-01
Tag Number:
Collection Date: 7/13/2004 7:30:00 AM
Matrix: WASTE WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FUEL HYDROCARBONS, 8015AZR1		8015AZR1		Analyst: MH		
Gasoline Hydrocarbons: C6-C10	< 2.0	2.0		mg/L	1	7/21/2004
Diesel Hydrocarbons: C10-C22	< 3.0	3.0		mg/L	1	7/21/2004
Oil Hydrocarbons: C22-C32	< 10	10		mg/L	1	7/21/2004
Fuel Hydrocarbons, C10-C32	< 13	13		mg/L	1	7/21/2004
Surr: O-Terphenyl	105	70-130		%REC	1	7/21/2004
VOLATILES BY GC/MS		SW8260B		Analyst: JR		
1,1,1-Trichloroethane	< 1.0	1.0		µg/L	1	7/13/2004
1,1,2,2-Tetrachloroethane	< 1.0	1.0		µg/L	1	7/13/2004
1,1,2-Trichloroethane	< 1.0	1.0		µg/L	1	7/13/2004
1,1-Dichloroethane	< 1.0	1.0		µg/L	1	7/13/2004
1,1-Dichloroethene	< 1.0	1.0		µg/L	1	7/13/2004
1,1-Dichloropropene	< 1.0	1.0		µg/L	1	7/13/2004
1,2,3-Trichlorobenzene	< 2.0	2.0		µg/L	1	7/13/2004
1,2,3-Trichloropropane	< 2.0	2.0		µg/L	1	7/13/2004
1,2,4-Trichlorobenzene	< 1.0	1.0		µg/L	1	7/13/2004
1,2,4-Trimethylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
1,2-Dibromoethane	< 1.0	1.0		µg/L	1	7/13/2004
1,2-Dichlorobenzene	< 1.0	1.0		µg/L	1	7/13/2004
1,2-Dichloroethane	< 1.0	1.0		µg/L	1	7/13/2004
1,2-Dichloropropane	< 1.0	1.0		µg/L	1	7/13/2004
1,3,5-Trimethylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
1,3-Dichlorobenzene	< 1.0	1.0		µg/L	1	7/13/2004
1,3-Dichloropropane	< 1.0	1.0		µg/L	1	7/13/2004
1,4-Dichlorobenzene	< 1.0	1.0		µg/L	1	7/13/2004
2,2-Dichloropropane	< 2.0	2.0		µg/L	1	7/13/2004
2-Butanone (MEK)	< 5.0	5.0		µg/L	1	7/13/2004
2-Chlorotoluene	< 1.0	1.0		µg/L	1	7/13/2004
2-Hexanone	< 5.0	5.0		µg/L	1	7/13/2004
4-Chlorotoluene	< 1.0	1.0		µg/L	1	7/13/2004
4-Isopropyltoluene	< 1.0	1.0		µg/L	1	7/13/2004
4-Methyl-2-pentanone	< 5.0	5.0		µg/L	1	7/13/2004
Acetone	< 20	20		µg/L	1	7/13/2004
Benzene	< 1.0	1.0		µg/L	1	7/13/2004
Bromobenzene	< 1.0	1.0		µg/L	1	7/13/2004
Bromochloromethane	< 1.0	1.0		µg/L	1	7/13/2004
Bromodichloromethane	< 1.0	1.0		µg/L	1	7/13/2004
Bromoform	< 1.0	1.0		µg/L	1	7/13/2004
Bromomethane	< 5.0	5.0		µg/L	1	7/13/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

Page 2 of 3



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 27-Jul-04

CLIENT: Innovative Technical Solutions, Inc.
Lab Order: 04070822
Project: USDA Phase #/03-190.02
Lab ID: 04070822-01D

Client Sample ID: ST-4331-01
Tag Number:
Collection Date: 7/13/2004 7:30:00 AM
Matrix: WASTE WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		SW8260B		Analyst: JR		
Carbon tetrachloride	< 1.0	1.0		µg/L	1	7/13/2004
Chlorobenzene	< 1.0	1.0		µg/L	1	7/13/2004
Chloroethane	< 1.0	1.0		µg/L	1	7/13/2004
Chloroform	< 1.0	1.0		µg/L	1	7/13/2004
Chloromethane	< 5.0	5.0		µg/L	1	7/13/2004
cis-1,2-Dichloroethene	< 1.0	1.0		µg/L	1	7/13/2004
cis-1,3-Dichloropropene	< 1.0	1.0		µg/L	1	7/13/2004
Dibromochloromethane	< 1.0	1.0		µg/L	1	7/13/2004
Dichlorodifluoromethane	< 1.0	1.0		µg/L	1	7/13/2004
Ethylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
m,p-Xylene	< 2.0	2.0		µg/L	1	7/13/2004
Methyl tert-butyl ether	< 1.0	1.0		µg/L	1	7/13/2004
Methylene chloride	< 2.0	2.0		µg/L	1	7/13/2004
n-Butylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
n-Propylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
o-Xylene	< 1.0	1.0		µg/L	1	7/13/2004
sec-Butylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
Styrene	< 1.0	1.0		µg/L	1	7/13/2004
tert-Butylbenzene	< 1.0	1.0		µg/L	1	7/13/2004
Tetrachloroethene	< 1.0	1.0		µg/L	1	7/13/2004
Toluene	< 1.0	1.0		µg/L	1	7/13/2004
trans-1,2-Dichloroethene	< 1.0	1.0		µg/L	1	7/13/2004
trans-1,3-Dichloropropene	< 1.0	1.0		µg/L	1	7/13/2004
Trichloroethene	< 1.0	1.0		µg/L	1	7/13/2004
Trichlorofluoromethane	< 1.0	1.0		µg/L	1	7/13/2004
Vinyl acetate	< 1.0	1.0		µg/L	1	7/13/2004
Vinyl chloride	< 1.0	1.0		µg/L	1	7/13/2004
Surr: 4-Bromofluorobenzene	74.0	73.2-112		%REC	1	7/13/2004
Surr: Dibromofluoromethane	76.0	67.1-123		%REC	1	7/13/2004
Surr: Toluene-d8	76.7	72.3-112		%REC	1	7/13/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory

(3) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

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APPENDIX D

**REPORT OF FINDINGS LIMITED ASBESTOS AND LEAD-BASED PAINT
INSPECTION
BY AMEC EARTH AND ENVIRONMENTAL
(AUGUST 4, 2004)**



**REPORT OF FINDINGS
LIMITED ASBESTOS AND LEAD-BASED PAINT INSPECTION
FOR THE
UNITED STATES DEPARTMENT OF AGRICULTURE
BUILDINGS 1, 2, 3, 41, 42, 46, THE APHIS BUILDING AND
GREENHOUSE 44
4331 & 4135 EAST BROADWAY
PHOENIX, ARIZONA**

Submitted to:
Innovative Technical Solutions, Inc.
Tempe, Arizona

Submitted by:
AMEC Earth & Environmental, Inc.
Tempe, Arizona

September 9, 2004

AMEC Project No 4-11F-003118



September 9, 2004

AMEC Project No. 4-11F-003118

Mr. Frank Van Alstine
Project Manager
Innovative Technical Solutions, Inc.
960 West Elliot Road, Suite 108
Tempe, Arizona 85284

Dear Mr. Van Alstine:

**Re: Report of Findings
Limited Asbestos and Lead-Based Paint Inspection
United States Department of Agriculture
4331 & 4135 East Broadway Road
Phoenix, Arizona**

AMEC Earth and Environmental, Inc. (AMEC) is pleased to submit this report of findings for the limited asbestos and lead-based paint inspection conducted at the subject site referenced above. AMEC performed its services in accordance with our Proposal No. PZ04-4-14 dated April 14, 2004.

This report identifies the scope, procedures, summary of findings and qualifications of the inspection. Additionally, material sample sheets, laboratory analysis reports and personnel accreditations are included in the report's appendices.

AMEC appreciates this opportunity to provide professional environmental consulting services to the Innovative Technical Solutions, Inc. and we look forward to continuing our relationship.

Sincerely,

AMEC Earth & Environmental, Inc.

Pam Barger
Project Manager
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LIST OF APPENDICES

APPENDIX A.....	Material Sample Sheets
APPENDIX B.....	Asbestos Laboratory Analysis Report
APPENDIX C.....	Detailed XRF Testing Results & XRF Calibration Sheet
APPENDIX D.....	Personnel Accreditations



SECTION 1: ASBESTOS INSPECTION SERVICES

1.0 PROJECT INFORMATION

Based upon the Innovative Technical Solutions, Inc.'s (ITSI) request, AMEC Earth & Environmental, Inc. (AMEC) performed a preliminary asbestos screening of Buildings 1, 2, 3, 41, 42, 46, the APHIS Building and Greenhouse 44. Buildings 1, 2, 3 and the APHIS Building are located at 4135 East Broadway Road while Buildings 41, 42, 46 and Greenhouse 44 are located at 4331 East Broadway Road in Phoenix, Arizona.

2.0 SCOPE OF SERVICES

The primary intent of AMEC's services was to compile a list of potential asbestos-containing materials (ACM) and to collect and analyze friable or predominant building materials associated with the above mentioned subject buildings. AMEC's services were performed in general accordance with AMEC's PZ04-4-14 dated April 14, 2004.

AMEC's services included a physical inspection of suspect materials and the collection and analysis of samples of various friable and predominant materials to determine the presence of ACM. "Friable" materials are those which, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Homogeneous areas of suspect materials were classified as either Surfacing, Thermal System Insulation (TSI) or Miscellaneous, in accordance with the Asbestos Hazard Emergency Response Act (AHERA) protocol.

The inspection included the identification of both friable and non-friable materials used in the construction of the subject building. These materials were classified as Regulated ACM (RACM), Category I non-friable ACM, or Category II non-friable ACM in accordance with National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations.

This inspection does not nor was intended to satisfy any NESHAP notification requirements for either the renovation or demolition of any of the subject buildings. This inspection was only intended to locate potential areas with ACM and to document whether a comprehensive survey is warranted.

3.0 INSPECTION PROCEDURES

The field portion of our work included a visual inspection of accessible functional spaces and the collection and analysis of samples of suspect ACM. The field portion of the work was conducted from July 12, 2004 through July 14, 2004. The inspection and bulk sampling activities were performed by AMEC representative Mr. Dale Owens. Mr. Owens is an accredited EPA/AHERA Building Inspector. Reference Appendix D for copies of personnel accreditations.

3.1 Visual Inspection

The field portion of the inspection included the observation of accessible interior building surfaces and finishes associated with the walls, floors, ceilings, and with the building's existing HVAC and plumbing systems. The inspection also included accessible exterior building finishes and materials on the roof. Destructive activities such as breaking through walls or ceilings was not performed for the purpose of identifying suspect materials. Observations were made to identify

and locate accessible suspect ACM. Suspect ACM are defined as those classes of materials that have, in the past, been known to contain asbestos in some formulations.

During our walk-through, suspect materials were noted and grouped by homogeneous area. A "homogeneous area" (for bulk sampling purposes) is defined as an area that contains building materials, suspect of containing asbestos, that seem by texture, color, and wear to be uniform and applied or installed during the same general time period. Our inspector also evaluated the friability of each material by physically touching each of the suspect materials.

The materials listed below were identified in the building during AMEC's visual inspection and were considered suspect of containing asbestos. The two digit number preceding the material description indicates the homogeneous area assigned to each suspect material and may be cross referenced in the Material Sample Sheets in Appendix A. A total of 149 different homogeneous areas were identified by AMEC in the subject buildings. The materials identified in **bold text** were sampled and determined by laboratory analysis to contain asbestos in amounts greater than one percent. The materials that were not sampled are identified as such and are assumed to contain asbestos until sampled and proven otherwise.

Building 1

- 1-01 – 9" x 9" Floor tile and mastic, white and tan (not sampled)
- 1-02 – Cove base mastic, tan (not sampled)
- 1-03 – Gypsum wallboard, light finish
- **1-04 – 2' x 4' Acoustical ceiling panel, fissures and holes**
- 1-05 – Frame sealant, white (not sampled)
- 1-06 – Carpet mastic, tan (not sampled)
- 1-07 – Plaster, smooth finish (not sampled)
- 1-08 – Ceramic tile, brown and tan (not sampled)
- 1-09 – Ceramic tile, brown (not sampled)
- **1-10 – Equipment sealant, black**
- 1-11 – Pipe run insulation
- **1-12 – Pipe fitting insulation**
- 1-13 – Woven duct boot, black (not sampled)
- 1-14 – Gypsum wallboard, smooth finish (not sampled)
- 1-15 – 9" x 9" Floor tile and mastic, tan and brown (not sampled)
- 1-16 – 2' x 4' Acoustical ceiling panel, tan
- 1-17 – Cementitious building board, black counter tops (not sampled)
- 1-18 – Sink acoustical coating, gray (not sampled)
- 1-19 – 12" x 12" Floor tile and mastic, white and black (not sampled)
- 1-20 – Window glazing compound. Gray (not sampled)
- 1-21 – Cementitious building board, black fume hoods (not sampled)
- 1-22 – 12" x 12" Floor tile and mastic, brown (not sampled)
- 1-23 – Duct wrap insulation, tan
- 1-24 – Tank insulation
- 1-25 – 12" x 12" Floor tile and mastic, tan and brown (not sampled)
- 1-26 – Cove base mastic, tan (not sampled)
- 1-27 – Plaster, rough finish (not sampled)
- 1-28 – Built-up roofing (not sampled)

Building 1 (continued)

- 1-29 – Roof cement, gray and black (not sampled)
- 1-30 – Cementitious building board, green chalkboard (not sampled)
- 1-31 – Brick and mortar (not sampled)
- 1-32 – Concrete (not sampled)
- 1-33 – Vinyl sheet flooring, white, tan and blue (not sampled)

Building 2

- 2-01 – 9" x 9" Floor tile and mastic, tan and brown (not sampled)
- 2-02 – Cove base mastic, brown (not sampled)
- 2-03 – 2' x 4' Acoustical ceiling panel, fissures and holes
- 2-04 – Sink acoustical coating, gray (not sampled)
- 2-05 – Cementitious building board, black sink (not sampled)
- 2-06 – Plaster, smooth finish (not sampled)
- 2-07 – Frame sealant, white (not sampled)
- 2-08 – Ceramic tile, brown (not sampled)
- 2-09 – Ceramic tile, brown and tan (not sampled)
- 2-10 – Gypsum wallboard, light finish
- 2-11 – Built-up roofing (not sampled)
- 2-12 – Roof cement, gray and black (not sampled)
- 2-13 – Brick and mortar (not sampled)
- 2-14 – Concrete (not sampled)
- 2-15 – Plaster, rough finish (not sampled)

Building 3

- 3-01 – Pipe run insulation
- **3-02 – Pipe fitting insulation**
- 3-03 – Frame sealant, white (not sampled)
- 3-04 – Gypsum wallboard, medium finish (not sampled)
- 3-05 – Frame sealant, tan (not sampled)
- 3-06 – Expansion joint, white (not sampled)
- **3-07 – Pipe hanger support**
- 3-08 – Brick and mortar (not sampled)
- 3-09 – Concrete (not sampled)
- 3-10 – Built-up roofing (not sampled)
- 3-11 – Roof cement, gray and black (not sampled)

APHIS Building

- A-01 – 12" x 12" Floor tile and mastic, white and gray (not sampled)
- A-02 – Cove base mastic, tan (not sampled)
- A-03 – Gypsum wallboard, medium finish
- A-04 – 2' x 4' Acoustical ceiling panel, fissures and holes
- A-05 – Caulking compound, white (not sampled)
- A-06 – 12" x 12" Floor tile and mastic, tan and brown (not sampled)
- A-07 – Cove base mastic, tan (not sampled)
- A-08 – Gypsum wallboard, light finish (not sampled)

APHIS Building (continued)

- A-09 – 2' x 4' Acoustical ceiling panel, smooth finish
- A-10 – Cementitious building board, black counter top (not sampled)
- A-11 – 12" x 12" Floor tile and mastic, white and brown (not sampled)
- A-12 – Gypsum wallboard, medium finish (not sampled)
- A-13 – Carpet mastic, tan (not sampled)
- A-14 – Cove base mastic, tan (not sampled)
- A-15 – 2' x 4' Acoustical ceiling panel, bumpy finish
- A-16 – Gypsum wallboard, covered
- A-17 – 12" x 12" Floor tile and mastic, white and gray (not sampled)
- A-18 – Frame sealant, white (not sampled)
- A-19 – Caulking compound, white (not sampled)
- A-20 – Built-up roofing (not sampled)
- A-21 – Roof cement, gray and black (not sampled)
- A-22 – Brick and mortar (not sampled)
- A-23 – Concrete (not sampled)

Building 41

- 41-01 – 12" x 12" Floor tile and mastic, light green (not sampled)
- 41-02 – Cove base mastic, tan (not sampled)
- 41-03 – Gypsum wallboard, medium finish
- 41-04 – Carpet mastic (not sampled)
- 41-05 – Frame sealant, gray (not sampled)
- 41-06 – 2' x 4' Acoustical ceiling panel, fissures and holes
- 41-07 – Window glazing compound, gray (not sampled)
- 41-08 – Gypsum wallboard, light finish
- 41-09 – Plaster, light finish (not sampled)
- 41-10 – Duct sealant, gray (not sampled)
- 41-11 – Frame sealant, brown (not sampled)
- 41-12 – 1' x 1' Acoustical ceiling tile, groove finish
- 41-13 – 1' x 1' Acoustical ceiling tile, holes
- 41-14 – Plaster, light finish
- 41-15 – 12" x 12" Floor tile and mastic, tan and gray (not sampled)
- 41-16 – 9" x 9" Floor tile and mastic, tan (not sampled)
- 41-17 – Ceramic tile, tan (not sampled)
- 41-18 – Ceramic tile, green (not sampled)
- 41-19 – 1' x 1' Acoustical ceiling tile, fissures and holes (not sampled)
- 41-20 – Vinyl sheet flooring, tan and gray (not sampled)
- 41-21 – 1' x 1' Acoustical ceiling tile, bumps and holes (not sampled)
- 41-22 – Cementitious building board, black counter tops (not sampled)
- 41-23 – Cementitious building board, gray fume hoods (not sampled)
- 41-24 – 1' x 1' Acoustical ceiling tile, random holes (not sampled)
- 41-25 – 12" x 12" Floor tile and mastic, white and gray (not sampled)
- 41-26 – Fire door insulation (not sampled)
- 41-27 – 12" x 12" Floor tile and mastic, tan (not sampled)
- 41-28 – Mastic (not sampled)

Building 41 (continued)

- 41-29 – 12" x 12" Floor tile and mastic, tan and brown (not sampled)
- 41-30 – 12" x 12" Floor tile and mastic, green (not sampled)
- 41-31 – Sink acoustical coating, gray (not sampled)
- 41-32 – Caulking compound, white (not sampled)
- 41-33 – Pipe run insulation
- 41-34 – Built-up roofing (not sampled)
- 41-35 – Roof cement, gray and black (not sampled)
- 41-36 – Duct sealant, silver (not sampled)
- 41-37 – Built-up roofing, white (not sampled)
- 41-38 – Plaster, rough finish (not sampled)
- 41-39 – 1' x 1' Acoustical ceiling tile, random holes (not sampled)
- 41-40 – Brick and mortar (not sampled)
- 41-41 – Concrete (not sampled)

Building 42

- 42-01 – Vinyl sheet flooring, white, tan and green (not sampled)
- 42-02 – Gypsum wallboard, light finish
- 42-03 – 1' x 1' Acoustical ceiling tile, fissures and holes (not sampled)
- 42-04 – Cementitious building board, black counter tops (not sampled)
- 42-05 – Cementitious building board, white fume hoods (not sampled)
- 42-06 – Frame sealant, gray (not sampled)
- 42-07 – 12" x 12" Floor tile and mastic, gray and brown (not sampled)
- 42-08 – 1' x 1' Acoustical ceiling tile, large fissures and holes
- 42-09 – 1' x 1' Acoustical ceiling tile, holes
- 42-10 – Expansion joint, brown (not sampled)
- 42-11 – Carpet mastic, tan (not sampled)
- 42-12 – Cove base mastic, tan (not sampled)

Building 46

- 46-01 – 12" x 12" Floor tile and mastic, white and brown (not sampled)
- 46-02 – Gypsum wallboard, light finish
- 46-03 – 1' x 1' Acoustical ceiling tile, random holes
- 46-04 – Cementitious building board, green chalkboard (not sampled)
- 46-05 – Sink acoustical coating, gray (not sampled)
- 46-06 – Cove base mastic, tan (not sampled)
- 46-07 – Vinyl sheet flooring, gray and white (not sampled)
- 46-08 – 2' x 2' Acoustical ceiling panel, holes
- 46-09 – 9" x 9" Floor tile and mastic, tan (not sampled)
- 46-10 – Cove base mastic, brown (not sampled)
- 46-11 – 1' x 1' Acoustical ceiling tile, holes
- 46-12 – 12" x 12" Floor tile and mastic, tan (not sampled)

Greenhouse 44

- GH-01 – Window glazing compound, gray
- GH-02 – Cementitious building board, gray (not sampled)

3.2 Bulk Sampling

AMEC collected a total of 34 bulk samples from various suspect materials identified during the inspection. Only a portion of the materials identified was sampled and none of the materials identified were sampled according to EPA's AHERA protocol. A minimum of three samples is recommended by EPA guidelines to confirm a negative or non-asbestos result for a homogeneous area. Samples were labeled and appropriate chain-of-custody documentation was completed.

Samples were collected from readily accessible materials which were considered suspect ACM. Destructive activities such as breaking through walls or ceilings was not performed for the purpose of obtaining samples, and no attempt was made to dismantle equipment.

3.3 Bulk Sample Analysis

Samples were delivered to AMEC's in house laboratory in Tempe, Arizona for visual inspection and microscopic analysis. Samples were analyzed using Polarized Light Microscopy (PLM) coupled with dispersion staining as outlined in the EPA Method 600/R-93/116. AMEC's laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) and has been assigned the NVLAP Lab Code 200444-0.

The percentage quantification of individual sample constituents was determined by visual estimation. Under regulations promulgated by the EPA, asbestos-containing materials are defined as those materials, which contain more than one percent of specified asbestiform minerals. Bulk samples determined to contain more than one percent of specified asbestiform minerals are referred to as "positive". All of the bulk samples that were collected during the inspection were analyzed.

It should be noted that although the EPA considers one positive sample sufficient to identify the presence of asbestos in a particular material, a minimum of three samples are recommended by EPA guidelines to confirm a negative or non-asbestos result for a homogeneous area.

4.0 SUMMARY OF FINDINGS – ASBESTOS

Of the 33 suspect materials sampled by AMEC, six were found to contain asbestos in amounts greater than one percent by laboratory analysis. Laboratory analysis sheets are included in Appendix B. A summary of our findings for identified ACM is represented in the table below:

Building 1

HA No	Material Description	NESHAP Classification	% Asbestos and Type	Material Locations
1-04	2' x 4' Acoustical ceiling panel, white with fissures and holes	RACM	1-2% Chrysotile	Throughout north section of Building 1
1-10	Equipment sealant	RACM	10-20% Chrysotile	In mechanical rooms on HVAC equipment seams

Building 1 (continued)

HA No.	Material Description	NESHAP Classification	% Asbestos and Type	Material Locations
1-12	Pipe fitting insulation	RACM	1-2% Chrysotile	In mechanical rooms on insulated pipe runs

Building 3

HA No.	Material Description	NESHAP Classification	% Asbestos and Type	Material Locations
3-02	Pipe fitting insulation	RACM	2-5% Chrysotile	On east end of building on insulated pipe runs
3-07	Pipe hanger supports	RACM	20-30% Chrysotile	On insulated pipe runs

Greenhouse 44

HA No.	Material Description	NESHAP Classification	% Asbestos and Type	Material Locations
GH-01	Window glazing compound, gray	RACM	20-30% Chrysotile	On windows of greenhouse

These tables only describe the materials sampled during our fieldwork and were found to contain asbestos. All of the materials that were identified but not sampled are assumed to contain asbestos until proven otherwise by laboratory analysis. Furthermore, any of the materials that were sampled and identified as not containing asbestos will also need to be assumed since the appropriate number of samples was not collected per AHERA protocol. This includes all of the flooring that was not sampled and is located at the subject buildings.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 NESHAP Regulations

The scope and applicability of the National Emission Standard for Hazardous Air Pollutants (NESHAP) asbestos regulation (Title 40 CFR, Part 61 Subpart M), applies in all buildings except single residential buildings having four units or less. The NESHAP requires a thorough inspection before any renovation or demolition activity. Whenever regulated asbestos-containing material (RACM) is about to be distributed by demolition or renovation the NESHAP requires EPA notification, requires the management of waste through and after disposal, and no visible emissions.

Category I material is defined as asbestos-containing resilient floor covering, asphalt roofing products, packings and gaskets. Asbestos-containing mastic is also considered a Category I material (EPA determination – April 9, 1991). Category II material is defined as all remaining types of non-friable ACM not included in Category I that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. A non-friable asbestos-cement product such as "transite" is an example of Category II material.

The asbestos NESHAP specifies that Category I materials which are not in poor condition and not friable prior to demolition do not have to be removed, except where demolition will be by intentional burning. However, regulated asbestos-containing materials (RACM) and Category II materials that have a high probability of being crumbled, pulverized, or reduced to powder as part of demolition must be removed before renovation or demolition begins. Advance notice of the abatement and/or demolition must be provided to the State NESHAP coordinator and Maricopa County 10 working days before work begins. The 10-day notification for asbestos removal is required when quantities of RACM exceed 260 linear feet and/or 160 square feet.

5.2 OSHA Regulations

The scope and applicability of the Occupational Safety and Health Administration (OSHA) asbestos regulation (29 CFR 1926.1101 Asbestos) applies whenever a worker may be exposed to asbestos. This regulation requires that employers protect employees. The regulation states that the building owner is the basic employer. The OSHA asbestos regulation serves as a specification for contractors, and a notification regulation for building owners. The OSHA regulation 29 CFR 1926.1101 (k) Communication of Hazards requires that the building owner determine the presence, location and quantity of ACM before construction activities begin. The building owner must notify persons of the presence, location and quantity of ACM before it is disturbed. Prior to disturbance, the building owner must notify contractors, in-house maintenance personnel, adjacent contractors on multi-employer worksites and tenants.

Based on the OSHA asbestos standard 29 CFR 1926.1101. Class I Asbestos Work means activities involving the removal of asbestos containing Thermal System Insulation (TSI) and Surfacing Material. This includes, but is not necessarily limited to; pipe fitting insulation, pipe run insulation, and fireproofing.

Based on the same OSHA asbestos standard, Class II Asbestos Work means activities involving the removal of ACM which is not TSI or surfacing materials. This includes, but is not necessarily limited to; wallboard, floor tile and sheeting, roofing and siding shingles, construction mastics, duct seam tape, fire doors and drywall compound.

It should be noted that OSHA regulations 29 CFR 1926.1101 dealing with asphaltic roof coatings and sealants which contain asbestos have been amended to state: "This section does not apply to asbestos-containing asphalt roof cements, coatings and mastic." Federal Register, Volume 63, Number 124, Pages 35137-35138, June 29, 1998.

5.3 Recommendations

Asbestos is not required to be removed from an occupied building. However, management of ACM is necessary to prevent exposure to maintenance and custodial personnel, tenants and any future contractors. Routine maintenance can disturb ACM that will cause it to become airborne. An asbestos Management Plan is recommended for the safe handling of building materials that contain asbestos. A Management Plan would properly identify the ACM and their location. This will help to keep maintenance and custodial personnel, tenants and any future contractors notified of the presence and type of ACM in the subject building.

One of the most accessible materials located in the buildings that was not sampled is the flooring. The following is a list of the flooring that was identified in each of the buildings:

Building 1

- 1-01 – 9" x 9" Floor tile and mastic, white and tan
- 1-08 – Ceramic tile, brown and tan
- 1-09 – Ceramic tile, brown
- 1-15 – 9" x 9" Floor tile and mastic, tan and brown
- 1-19 – 12" x 12" Floor tile and mastic, white and black
- 1-22 – 12" x 12" Floor tile and mastic, brown
- 1-25 – 12" x 12" Floor tile and mastic, tan and brown
- 1-33 – Vinyl sheet flooring, white, tan and blue

Building 2

- 2-01 – 9" x 9" Floor tile and mastic, tan and brown

APHIS Building

- A-01 – 12" x 12" Floor tile and mastic, white and gray
- A-06 – 12" x 12" Floor tile and mastic, tan and brown
- A-11 – 12" x 12" Floor tile and mastic, white and brown
- A-17 – 12" x 12" Floor tile and mastic, white and gray

Building 41

- 41-01 – 12" x 12" Floor tile and mastic, light green
- 41-15 – 12" x 12" Floor tile and mastic, tan and gray
- 41-16 – 9" x 9" Floor tile and mastic, tan
- 41-17 – Ceramic tile, tan
- 41-18 – Ceramic tile, green
- 41-20 – Vinyl sheet flooring, tan and gray
- 41-25 – 12" x 12" Floor tile and mastic, white and gray
- 41-27 – 12" x 12" Floor tile and mastic, tan
- 41-29 – 12" x 12" Floor tile and mastic, tan and brown
- 41-30 – 12" x 12" Floor tile and mastic, green

Building 42

- 42-01 – Vinyl sheet flooring, white, tan and green
- 42-07 – 12" x 12" Floor tile and mastic, gray and brown

Building 46

- 46-01 – 12" x 12" Floor tile and mastic, white and brown
- 46-09 – 9" x 9" Floor tile and mastic, tan
- 46-12 – 12" x 12" Floor tile and mastic, tan

Again, since these floorings were identified and not sampled, they are all assumed to contain asbestos. Floor tile that contains asbestos is a special consideration to custodial personnel that perform routine cleaning and maintenance at the site. Once a flooring material has been identified as ACM it is prohibited to perform sanding, dry stripping and use of highly abrasive



stripping/buffing pads on the ACM flooring material. Additionally, OSHA requires that any floor buffers used on ACM flooring be not operated at speeds of higher than 300 rpm. If any of the ACM flooring becomes dislodged or broken, any personnel that is to perform maintenance to repair this flooring will need to be properly certified per OSHA guidelines. Again, the only way to prove that any of the flooring materials do not contain asbestos is by sampling the material by a certified asbestos building inspector and laboratory analysis.

Before any of the materials located in the buildings are to be disturbed, by either renovation or demolition of the building, a full comprehensive asbestos building inspection should be conducted at the site. This survey can be used as a guideline for the number of samples to be collected during the comprehensive asbestos survey.

6.0 QUALIFICATIONS

AMEC has endeavored to observe the existing conditions within the subject buildings using generally accepted procedures and that degree of care which is ordinary for others performing similar services. Regardless of the thoroughness of any inspection, there is always a possibility some areas containing asbestos may be inaccessible, or are different from those at specific sample locations. Therefore, conditions at every location may not be as anticipated. The findings presented in this report are relevant to the dates of our site work and the scope of included services, and should not be relied on to represent conditions at substantially later dates. Again, this survey was not intended to fulfill the requirements as described in EPA NESHAP regulations.

SECTION 2: LEAD-BASED PAINT INSPECTION SERVICES

7.0 LEAD-BASED PAINT TESTING

On July 13, 2004, AMEC performed a limited lead-based paint inspection work at Buildings 1, 2, 3, 4, 41, 42, 46, the APHIS Building and Greenhouse 44 located at the subject property. AMEC's accredited EPA Lead Risk Assessor Mr. Dale Owens performed the inspection. Reference Appendix D for the personnel accreditations.

7.1 XRF Testing Equipment and Method

Lead-based paint testing was conducted using a portable x-ray fluorescence (XRF) spectrum analyzer, Niton XL-309, manufactured by the NITON Corporation of Bedford, Massachusetts. The Niton XL-309 is calibrated to measure the K-shell and the L-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found.

This inspection was not conducted in accordance with the EPA's *Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities (Section 402/404 of the Toxic Substances Control Act)* and the United States Department of Housing and Urban Development's (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997. Our services were not intended to fulfill the requirements for the identification of lead-based paint as described in applicable federal, state, and local regulations.

The purpose of this inspection is to provide a screening of painted surfaces identified in the subject buildings and identify surfaces, which contain lead-based paint. HUD and the EPA currently define lead-based paint as paint or other surface coating which contains lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm^2).

XRF readings were taken using the "K&L + Spectra" mode of the Niton XL-309. "K&L + Spectra" mode measurements have no predetermined testing length, and automatically adjust to account for various types of substrates and material's densities. The precision of the XRF readings is proportional to the square root of the number of x-rays counted by the scanner. The longer the test, the higher the level of precision as compared against the set threshold level of $1.0 \text{ mg}/\text{cm}^2$.

In the "K&L + Spectra" mode, the Niton XL-309 tests until a K-shell result is indicated as either positive or negative, compared to the threshold level based on the current precision of the test. Correction for paint matrix and substrate effects is performed automatically. The correction function is based on measurements performed by the manufacturer with NIST paint film standards laid over a variety of substrates typically encountered in construction.

Based on the XRF Performance Characteristic Sheet (PCS) jointly released by HUD and EPA (effective June 26, 1996), there is no inconclusive range for the Niton XL-309 in the "K&L + Spectra" mode. Results are classified as positive if they are greater than $1.0 \text{ mg}/\text{cm}^2$. Results are classified as negative if they are less than $1.0 \text{ mg}/\text{cm}^2$. No substrate correction is required for testing using the "K&L + Spectra" mode.

XRF readings were made on selected testing combinations in various room equivalents in an effort to test typical materials, which are representative in the construction of the building. Testing combinations were tested non-destructively by holding the Niton XL-309 against the surface being tested. At each XRF sample location the Niton XL-309 shutter is opened, and one reading was made using the "K&L + Spectra" testing mode. Results of each test were read from the digital display of the instrument console and recorded on the XRF detailed testing data spread sheets attached in Appendix C.

To provide greater assurance that the spectrum analysis equipment is working properly, various quality control tests were performed before, during, and after our on-site work. At the beginning of testing the operator executes the Niton's self-calibration check. The resolution of the self-calibration should be 1000 eV or less. If the eV reading is acceptable the operator proceeds with five surface lead calibration checks and five buried lead calibration checks. If all readings are within acceptable range only then will operator proceed with testing.

As recommended by HUD, calibration check readings were made before testing the each site and every hour of continuous testing. Hourly calibration check readings are made on the 1.06 mg/cm² Standard Reference Material (SRM) paint film, developed by the National Institute of Standards and Technology (NIST).

7.2 XRF Testing Protocol

One XRF reading was made on various accessible building components. The classification is listed as either P, N, or I to identify the XRF result as either positive or negative, or inconclusive as compared against the 1.0 mg/cm² standard.

Building components typically include such items as the walls, floors, ceilings, doors, door casings, window frames, cabinets, and other individual items which are used in the construction of the building. The substrate is the material underneath the paint. Substrates were classified as one of six types: brick, concrete, drywall, metal, plaster, and wood. For substrates on top of substrates, the substrate directly beneath the painted surface is identified.

7.3 Data Recording

For each testing location, data was automatically recorded on the LBP testing data spread sheets, attached in Appendix C. XRF IDs are listed sequentially for each testing location evaluated during the survey. For each testing location the substrate, component name and visible paint color is recorded.

XRF readings were recorded for each assays made on the testing location. The XRF result is then classified as either positive, negative, or inconclusive based on the inconclusive range as previously described.

8.0 SUMMARY OF FINDINGS – LEAD-BASED PAINT

Based on the results of XRF testing, two testing locations were classified as positive for the presence of lead. The building components which were found to be positive for LBP are presented in the table below:

Building 42

ID #	Location	Substrate	Color	mg/cm ²	Room Equivalent
179	Floor	Concrete	Gray	1.0	North laboratory electrical room
190	Column	Metal	Off-White	4.7	I-Beam columns of building located on perimeter walls

9.0 REGULATORY CONSIDERATIONS

9.1 Federal Requirements

A copy of this summary must be provided to new lessees (tenants) and purchaser of this property under federal law (24 CFR Part 35 and 40 CFR Part 745) before they become obligated under a lease or sale contract. The complete report must also be provided to new purchasers and it must be made available to tenants.

9.2 OSHA Compliance

OSHA Regulations apply to all construction work where an employee may be occupationally exposed to lead, and therefore may be applicable to renovation or demolition projects involving paints with any concentration of lead.

It should be noted that a "Lead-Based Paint Inspection" is a survey to discover the existence of lead-based paint only, which is defined as paint or other coatings with lead levels of 1.0 mg/cm² or 0.5%. There are many other building materials, which may contain lead in the average building. When conducting construction activities which disturb lead in any amount or create an exposure to workers; the employer is required to provide worker protection and conduct exposure assessments. All employers should consult Federal OSHA Regulations at 29 CFR 1926.62, "Lead in Construction" standards for complete requirements.

10.0 RECOMMENDATIONS

From a regulatory standpoint, a building owner is currently not mandated to remove lead-based paint, based solely on its presence in a building. Should renovation or remodeling activities be planned which may impact or disturb building components coated with LBP, care should be taken to minimize or control the potential hazard from airborne lead-containing dust and debris during such work.

If the planned renovations are limited to repainting components coated with lead-based paint, care should be taken not to sand, abrade, or otherwise disturb the existing paint coating in such a

manner to create dust. It should be noted and understood that standard paints, primers, and paper wall coverings are not considered permanent encapsulants for lead-based paint.

If planned renovations are likely to include the demolition or removal of building components coated with lead-based paint, we recommend that workers performing such activities meet the requirements and utilize the engineering controls documented in the OSHA Lead Standards, 29 CFR 1926.62. Components should be removed intact, without disturbing the surface coating whenever possible.

Any disturbance of lead-painted surfaces should be executed in a manner which minimizes dust, and resulting debris and waste products should be contained to prevent the migration of lead contaminants from adjoining areas. Finish materials removed should be tested using Toxicity Characteristic Leaching Procedure (TCLP) methods to determine the characteristics of the waste. TCLP testing is to determine if a waste must be treated as hazardous or non-hazardous, which will impact disposal requirements.

11.0 QUALIFICATIONS

AMEC has endeavored to observe the existing conditions at the subject property using that degree of care and skill ordinarily exercised, under similar circumstances, by consultants providing similar services, practicing in this, or similar localities. Regardless of the thoroughness of a survey, there is always a possibility some areas containing lead were overlooked or inaccessible, or are different from those at specific sample locations. Therefore, conditions at every location may not be as anticipated.

Due to the nature of lead-based paint testing based on HUD Guidelines, inaccessibility, or due to an undetectable change in materials, additional lead may exist (undetected) in areas of the building. Additionally, renovation or construction may uncover altered or differing conditions.

Our services in no way are intended to determine or quantify the potential for emission of airborne lead at any future time, or to estimate the potential hazards for workers from exposure to lead during renovation or demolition activities. Furthermore, our services are not intended to characterize painted components to determine if potential waste streams are considered hazardous waste by EPA definition.